

CLAIMS

What we claim is:

Claim 1. A secure mail box comprising: a top port and a bottom port; a horizontal pivotal gate with limited angle of rotation, said gate including a substantially flat front part and a back part shaped to define a pocket for holding outgoing mail; said top port normally closed by said front part of said gate and said bottom port normally closed by a door, said door including a locking means; a basket for receiving incoming mail dropped therein from said gate, said basket shaped to provide complete air gap around the received mail; a source of short wave UV light mounted in a fixture, said fixture including a means for reflecting said UV light; a means for electrically powering said source of UV light for a predetermined time; a means for activating said source of UV light when said top port is closed by said gate whereby to expose the mail within the mail box to UV radiation and simultaneously generated ozone; a means to generate chlorine, hypochlorites mist and chlorine dioxide upon irradiation with said UV source; a means to generate ethylene oxide; and a flag having two light indicators on a top surface thereof for indicating activation of said source of UV light and non-activation of UV light.

Claim 2. The mailbox of claim 1, where said means to generate chlorine and hypochlorites mist comprises porous inert material impregnated with concentrated solution of alkaline hypochlorite.

Claim 3. The mailbox of claim 1 and claim 2, where said means to generate chlorine dioxide comprises inert porous material incrustated with alkaline chlorate.

Claim 4. The mailbox of claim 1 and claim 2 where said means to generate chlorine dioxide comprises inert porous material incrustated with mixture of alkaline chlorate and alkaline perchlorate.

Claim 5. The mailbox of claim 1, where said means to generate ethylene oxide comprises permeation tube of poly fluorinated plastic filed with high pressurized ethylene oxide.

Claim 6. The mailbox of claim 1, where said irradiating fixture is secured in place by strong permanent magnets on the plastic laminated steel inner surface of said box.

Claim 7. The mailbox of claims 1,2,3,4,5 and 6 wherein all inside surfaces of said mailbox are made from or are covered by ozone, chlorine and chlorine dioxide compatible materials whereby said surfaces will not interfere with said generated ozone to cause recombination to oxygen and with said generated chlorine and chlorine dioxide to cause corrosion.

Claim 8. The mailbox of claim 1,2,3,4,5,6 and 7 wherein said gate is extended to said back part shaped to define pocket and bended backward forming planar surface for deposited incoming mail.